IN THE CLAIMS:

Amend Claims 6, 8, 10-12, 19, 21 and 23 as indicated below by deleting the bracketed material and adding the underlined material.

a1

6. (Amended) An ultrasonic diagnostic system for the detection of a harmonic response of material inside the body [ultrasonic contrast agent] comprising:

an ultrasonic transducer probe for transmitting ultrasonic pulses at a first frequency into [a] the body [infused with an ultrasonic contrast agent] and receiving harmonic ultrasonic echo signals following a pulse transmission;

a receiver for receiving harmonic signals emanating from material inside the body [said ultrasonic contrast agent];

a programmable filter which filters said received harmonic signals with a passband excluding said first frequency and including a harmonic of said first frequency; and

a harmonic [contrast] signal detector for detecting said received harmonic signals; and

a display for displaying received harmonic signals.

a2

8. (Amended) The ultrasonic diagnostic system of Claim 7, wherein the programmable characteristics of said digital filter include the weighting of received signals [and the decimation rate of the filtered signals produced by said filter].

a3

10. (Amended) The ultrasonic diagnostic system of Claim 6, further comprising a B mode processor for producing B mode image signals,

wherein said programmable digital filter alternately provides signals for said B mode processor and said harmonic [contrast] signal detector.

11. (Amended) The ultrasonic diagnostic system of Claim 10, wherein said programmable digital filter provides filtered signals for said B mode processor which include signals of a B mode passband and excludes said harmonic of said first frequency, and provides filtered signals for said harmonic [contrast] signal detector which includes said harmonic of said first frequency and excludes signals of said first frequency.

3b

12. (Amended) The ultrasonic diagnostic system of Claim

a3 6, further comprising a three dimensional image processor [means] for rendering three dimensional images of said received harmonic signals.

a4 19. (Amended) A method for ultrasonically imaging a region of the body which exhibits a nonlinear response to ultrasonic energy [has been infused with a microbubble ultrasonic contrast agent] comprising the steps of:

transmitting a first pulse into the body which is focused at a first depth within the body to cause a nonlinear response from material [microbubbles] located at said first depth;

receiving echoes containing nonlinear response signal components following the transmission of said first pulse;

transmitting a second pulse into the body which is focused at a second depth within the body to cause a nonlinear response from material [microbubbles] located at said second depth;

receiving echoes containing nonlinear response signal components following the transmission of said second pulse; and

producing an ultrasonic image from nonlinear response signal components of echoes received following said first and second pulses.

a5 21. (Amended) The method of Claim 20, wherein said material comprises microbubbles and wherein said nonlinear response comprises the destruction of microbubbles.

a6 23. (Amended) The method of Claim 19, further comprising the steps of:

transmitting a third pulse following said first pulse which is focused at said first depth;

transmitting a fourth pulse following said second pulse which is focused at said second depth;

receiving echoes containing nonlinear response signal components following the transmission of said third and fourth pulses; and

wherein said producing step comprises producing an ultrasonic image from the combination of echoes received following said first and third pulses, and from the combination of echoes received following said second and fourth pulses.

31

Add new Claims 37 and 38 as indicated below:

a7 31 ~~37.~~ (Newly added) The ultrasonic diagnostic system of Claim 6, wherein said ultrasonic transducer probe includes an